

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-7, 22-31, 42 and 49-56 are pending in this Application. Claims 8-21, 32-41, and 43-48, and 50 were previously canceled without prejudice or disclaimer. Claims 22-31 and 51-54 have been withdrawn from consideration.

The outstanding Action presents a rejection of Claims 1-7 and 49 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement, a rejection of Claims 1-7 and 49 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, a rejection of Claims 1-6, 42, 49 and 55-56 under 35 U.S.C. 103(a) as being unpatentable over Izuka (U.S. Patent No. 5,666,235) in view of Murakami et al. (JP 06-251405) and further in view of Ikegame (JP 10-116431), and a rejection of Claim 7 under 35 U.S.C. 103(a) as being unpatentable over Izuka in combination with Murakami and Ikegame and further in view of Kubo (JP 07-105552).

The rejection of Claims 1-7 and 49 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement, is traversed as the support for the questioned language (“including plural printed circuit boards each containing at least one coil of a plurality of coils”) is self evident from previously noted FIG.1 showing of plural printed circuit boards each containing at least one coil of a plurality of coils. To the extent that the PTO might be requiring that there be disclosure of just one coil on one of the plurality of boards, an improperly narrow interpretation, this too is present. See page 14, lines 20-22 that indicate that “the focus coil 3f and tracking coils 3tr may also be formed separately in two printed circuit boards.” Accordingly, the improper rejection is traversed and withdrawal thereof is submitted to be in order.

The rejection of Claims 1-7 and 49 under the second paragraph of 35 U.S.C. §112 is also traversed. Claim 1 does not recite a broad range in reciting “at least one coil of a

plurality of coils” and a different range of said plurality of coils. Instead, the actual claim language requires “a single laminate structure including plural printed circuit boards each containing at least one coil of a plurality of coils.” As there are “plural circuit boards,” and each board contains “at least one coil,” the recitation of “said plurality of coils” is proper because, even if there is only one coil on each circuit board, this still means that there are a plurality coils because there are a plurality of circuit boards. As this rejection is clearly without merit as seeking to consider only part of the claim language in a vacuum, it should also be withdrawn.

Turning to the rejection of independent Claims 1 and 42, it is asserted by the outstanding Action that Izuka teaches “a coil unit comprising a single laminate structure including **plural** [emphasis added] circuit boards (28; Figs. 28-31)” This assertion is incorrect as element 28 in Figs. 28-31 of Izuka is not taught or suggested to be anything but the illustrated **single (not plural)** coil mounting plate 28 that mount all of the coils of Izuka in the Izuka disclosed gap.

As noted by Izuka at col. 10, lines 28-30, “FIG. 28 is a plan view showing the relative disposition between the tracking coil and the magnetic circuit employing a two-pole magnet.” On the other hand, Figs. 29-31 relate to a different embodiment “employing plural one-pole magnets” as stated in the brief descriptions of FIGS 29-31 at col. 10, lines 31-39, of Izuka.

As described at col. 21, lines 9-33, there is one “coil mounting substrate 28” mounting tracking coil 34 in this embodiment that has a two-pole magnet. FIG. 26 of Izuka shows that in this “two-pole magnet” embodiment the tracking coil is on one side of coil mounting substrate 28 and focus coil 31 is mounted on the other side as more fully explained at col. 20, lines 20-63. As further explained at col. 21, lines 34-41:

In the above-described embodiment, the magnets 47, 48 have two poles of opposite polarities. Alternatively, single-pole magnets 147,158 and 149,150 may also be provided in association with the first magnetized portions 47a, 48a and the second magnetized portions 47b, 48b, as shown in FIGS. 29

to 31. The magnets 147, 148 and 149, 150, respectively mounted on the upstanding pieces 45 and 48 making up the yoke 37, are oppositely poled, as shown in FIG. 29.

However, while this embodiment uses the above-noted single-pole magnets 147,158 and 149,150, it also uses only **one** coil mounting substrate 28 that mounts the tracking coils 34 and focus coil 31 on opposite sides thereof as clearly indicated by FIGS. 29-31.

Accordingly, if the PTO is to continue to assert that Izuka teaches “a coil unit comprising a single laminate structure including **plural** [emphasis added] circuit boards,” it must point out where this teaching can be found in Izuka. See *In re Rijckaert*, 9 F.3d 1531, 1533, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (“When the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference.”).

The outstanding Action follows the above-noted clearly erroneous assertion that Izuka teaches “a coil unit comprising a single laminate structure including **plural** [emphasis added] circuit boards” with a second clearly erroneous assertion suggesting that the single reference to Murakami stands as evidence that “this feature [with apparent regard to the Claim 1 and 42 requirement that the plural tilt coils must be provided together on one of the plural printed circuit boards] is well known in the art.” A single patent reference cannot be reasonably said to establish that anything is “well known in the art.” c.f. *In re Barr*, 170 USPQ330, 333-34 (CCPA 1971) (“[W]e agree with the solicitor that these patents are not weighty evidence of art recognition...”). More importantly, the tilt coils 5a and 5b that are noted at page 5 of the outstanding action to be “provided together,” do not alone “provide inclination adjusting tilting movement of the laminate structure different from the focusing movement and the tracking movement due to current in the plural tilt coils interacting with the magnetic field” as further incorrectly asserted at page 5 of the outstanding Action. Instead, Murakami

teaches that tilt coils 5a, 5b, 5c, and 5d are needed, with tilt coils 5a and 5b on one side of the object lens holder 2 and with tilt coils 5c and 5d on the other side of the object lens holder 2.

Even though the Murakami arrangement of four tilt coils 5a, 5b, 5c, and 5d on opposite sides an object lens holder 2 that surrounds the lens with the coil holder is completely foreign to the arrangement of the moveable bobbin structure taught by Izuka that supports the lens at one end completely apart from the slot that supports the servo coils on a separate plate, the outstanding Action asserts that the artisan would modify Izuka to take only half the needed tilt coils (just coils 5a, 5b) to provide less than a full tilt correction and then mount these coils 5a and 5b together on a separate circuit board from the coil mounting plate 28 that mount all of the coils of Izuka in the Izuka disclosed gap, because “Izuka teaches the provision of the coils using printed circuit boards” as incorrectly asserted at the bottom of page 5 of the outstanding Action. As noted above, Izuka teaches that the single coil mounting plate 28 is used to mount all coils, there is no teaching of providing different coils on different circuit boards in Izuka.

Turning to Ikegame, and as noted in the last response, this reference teaches two printed coils 23 and 24 formed on two boards, but these boards and their coils must be mounted in separate magnetic gaps if the teachings of Ikegame are followed. The top of page 6 of the outstanding Action simply ignores this point and asserts that Ikegame teaches an objective lens drive apparatus having “a magnetic circuit comprising a first and second magnets separated from one another by single gap; (See Detailed description [0033]; Figs. 11, 12, ref# 8,9).”

However, Figs. 11, 12, and 13, teach that the embodiment noted in paragraph [0028] of the translation is that of Figs. 11-15. The embodiment of Figs. 11-15 clearly has two magnet portions that makeup magnet 8. Each of these two magnet portions has a different polarity and abuts the adjacent magnet portion as most clearly shown by Fig 13. Thus, a first

magnetic field will extend between these two different polarity magnet portions of magnet 8 and it is this first magnetic field that will interact with coil 23 elements (focus coils 3, tracking coil 4, and tilt coil 5 illustrated in Fig. 13) on one side of the lens holder so that current flowing through each particular coil element will interact with the first magnetic field between the two oppositely poled magnet portions of magnet 8. Note paragraph [0030] and the statement that “magnets 8 and 9 magnetized the two poles of the direction X” and the “direction X” clearly illustrated by Fig. 13 and the showing of Fig. 14 of the flux density along the line “P-P” of Fig. 13, see paragraph [0032].

On the other hand, the two magnet portions that makeup magnet 9 that are on the other side of the lens holder are also mounted to have different polarity while being in an abutting relationship as indicated by “(9)” in Fig. 13 and as clearly shown by Fig. 11. These two magnet portions that makeup magnet 9 will provide a second magnetic field between them that will interact with coil 24 elements, including the second tilt coil 6. There is no teaching of a single magnetic gap that can provide a single magnetic field flux to interact with both coil portions 23 and 24 of Ikegame.

However, Claims 1 and 42 recite that each coil of the therein claimed “coil unit comprising a single laminate structure” must provide its recited adjusting movement due to current in that coil interacting with the magnetic field of the claimed single gap, not two different magnetic fields of two different magnetic gaps like those created by the plural magnet portions of magnet 8 and magnet 9 discussed above.

Thus, the analysis offered in the outstanding Action as to the teachings of Ikegame is as clearly erroneous as the analysis offered as to Izuka and Murakami. Accordingly, as the claim limitations of Claims 1 and 42 have not been properly construed and as the assertions of the above-noted teachings of Izuka, Murakami, and Ikegame are also clearly in error,

withdrawal of the improper rejection of independent Claims 1 and 42 under 35 U.S.C.

§ 103(a) over Izuka in view of Murakami and Ikegame is respectfully requested.

Moreover, as Claims 2-7, 49, 55, and 56 all depend from one of these independent claims and include all the limitations thereof, the rejection of Claims 2-7, 49, 55, and 56 under 35 U.S.C. § 103(a) over Izuka in view of Murakami and Ikegame is noted to also be improper for the reasons noted as to the independent Claims 1 and 42 and withdrawal of this improper rejection is respectfully requested for this reason.

Furthermore, as none of Izuka, Murakami, or Ikegame considered alone or together in any proper combination teach the subject matter of dependent Claims 2-7, 49, 55, and 56, withdrawal of this improper rejection is respectfully requested for this reason as well.

For example, none of the relied on references even remotely suggest the requirement of Claim 4 that the “plural printed circuit boards include a plurality of alternating first and second integrated printed circuit boards.” Instead of the required explanation as to how the references teach these required alternating first and second printed circuit boards, the third full paragraph on page 7 of the outstanding Action offers only the unsupported conclusion that “the combination of Izuka, Murakami et al. and Ikegame outlined above show that plural printed circuit boards include a plurality of alternating first and second printed circuit boards” with apparent reliance on the Figs. 28-30 showings of Izuka as to only one coil mounting plate 28. Such a conclusion that completely lacks even a hint of a rational underpinning cannot be said to establish a *prima facie* case of obviousness. *See In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stating that “[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”

Similarly, Claim 56 requires that:

only one laminate structure including the focus, tracking, and tilt coils is disposed in the gap and coupled with the lens holder with three pairs of

conductive elastic members being configured to have one conductive elastic member of each pair connected to one side of the one laminate structure and the second conductive elastic member of each pair connected to a side of the one laminate structure opposite to the one side, with each pair of elastic conductive members configured to provide elastic support for the one laminate structure and coupled the lens holder while supplying current exclusively to only one of the focus, tracking, and tilt coils.

Page 8 of the outstanding Action attempts to cure the inadequacies of the relied upon references with the misuse of the doctrine of inherency as to rejecting Claim 56. However, the PTO's own guidelines of MPEP 2112IV require that

To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

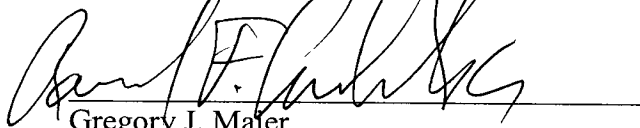
No such evidence is established by the mere conclusion of inherency offered by the outstanding Action.

With additional regard to Claim 7 and the added reliance on Kubo, it is noted that Kubo does not cure the deficiencies noted above as to the primary references to Izuka, Murakami, and Ikegame. Also, an undocumented belief as to "art-recognized equivalent structures" noted at page 10 of the outstanding Action is nothing more than a further conclusion lacking any rational underpinning that cannot be substituted for actual evidence relative to the above-noted *Kahn* decision. Therefore, the withdrawal of the improper rejection of Claim 7 over Izuka in view of Murakami and Ikegame and further in view of Kubo is also respectfully requested.

Accordingly, as no other issues are believed to remain outstanding relative to this application, it is believed to be clear that this application is in condition for formal allowance and an early and favorable action to this effect is, therefore, respectfully requested.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Gregory J. Maier', is written over a horizontal line.

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